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As in the peach leaf-curl, the first leaves that push in the spring are attacked, and are soon destroyed, the blistered and browned leaves all falling by the first of June. New leaves, free from the fungus, and weak shoots follow the attack. The absence of flowers led to the discovery of the method by which the fasciation is formed. In the normal condition of the cherry tree, the weak shoots become fruit-bearing spurs. From these spurs leaves annually appear, leaving an axillary bud, which becomes the flower bud of the next season. The leaf continues healthy throughout the growing season, and the parts that, morphologically speaking, might make a weak growth of wood, remain in a kind of microcosm as sepals, petals, stamens, and carpels, fed by the leaf for another year. But when this leaf is injured or destroyed, instead of the bud remaining quiescent, or the theoretical leaves changing into floral parts in the bud, a new growth of leaves and the weak shoot are produced instead. It is indeed so clear when once observed that the fasciation is simply the development to weak branches of what would normally be blossom spurs, that it was provoking to reflect that it had taken so many years to discover it.

An interesting observation was that the fungus should confine itself to the fasciated mass for so many years, and show no disposition whatever to spread to any other part of the tree. In practical gardening we were taught when these fungus pests appeared on orchard trees it was highly important to cut off the branches or leaves, and burn them, in order to check the spread. In the absence of actual demonstration in this case, one might with good reason assume that the mycelium of the parasite had obtained an entrance into the tissue and propagated itself continuously as the branches grew, and that a crop of spores in myriads must be produced annually. Only in rare instances were the circumstances favorable to their germination. The careful cutting away and burning of a few thousand spores would be a matter of small importance in comparison with the immense number that must escape the effort of the cultivator for their destruction. Safety lies evidently rather in the difficulty these minute bodies experience in finding the exact conditions necessary for their growth and development, than from the destruction of the germs themselves.

Distribution of Modiola tulipa.—Mr. JOHN FORD reported the finding by him of a half-grown specimen of *Modiola tulipa* Lam., near Cape May, N. J., on the 16th ult. As the species is essentially a southern one, it was at first supposed that the specimen had been carried north on the bottom of a vessel, or in some other artificial manner. The discovery two weeks later, by Mr. Ford, of a dozen or more adult specimens, at Anglesea, ten miles further north, seems to prove that the species has entered

upon its new conditions in large numbers, and with the purpose of making its new home a permanent one.

There is no record of the species having been found north of South Carolina before.

Toxodon and other Remains from Nicaragua, C. A.—Prof. LEIDY directed attention to some fossils, and remarked that they were part of a collection which he had been invited to examine by Mrs. Dr. B. F. Guerrero, now residing in this city. The collection was obtained from the northern part of Nicaragua, but nothing further had been learned about it. It mostly consisted of uncharacteristic fragments of bones, but among them were many interesting specimens referable to Megatherium, Elephant, Mastodon, Horse, Ox, Toxodon, and Capybara. The association of these animals is another illustration of the extension of the early South American quaternary fauna into North America. Among the remains of *Megatherium* there is the greater part of the distal extremity of a femur and a fragment of the mandible with two teeth. Of the Elephant there is a portion of a molar tooth. Of the Mastodon there is a molar tooth and portions of several others apparently of the *M. andium*. Of the Horse there are two upper molar teeth, with no well-marked difference distinguishing them from those of ordinary varieties of the Domestic Horse. Perhaps they may pertain to one or other of the species indicated by Prof. Owen with the names of *Equus curvidens* or *E. tau*. Of the Ox, the collection contains several horn-cores of different sizes; one, double the size of that of the Domestic Ox.

The Capybara is indicated by a fragment of the left ramus of a mandible with the first molar alveolus containing the greater part of the tooth. The specimen conforms to the corresponding portion of the jaw of the living Capybara, but indicates a considerably larger and more robust animal. Considering the difference in size and age of the fossil, it was probably a different species from the Capybara, and regarding it as such he proposes for it the name of *Hydrochoerus robustus*. The first molar tooth complete would have the appearance represented in figure 1, and, except in size, does not differ from that of the Capybara. Comparative measurements of the fossil are as follows:—

1.

	H. robustus.	Capybara.
Depth of mandible at first molar,	56 mm.	33 mm.
Length of first molar, . .	55 "	36 "
Fore and aft diameter, . .	25 "	17 "
Transverse diameter of last dental plate, ...	13 "	9 "
Diameter of incisive alveolus, .	20 "	10 "

Dr. Lund, in his Fossil Fauna of Brazil (An. Sc. Nat., 1839,